

Date: Tuesday, 1/23/2007 7:31:15 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: TUBE ASSEMBLY		
Job Number	: 30374					
Estimate Number	: 10923					
P.O. Number	: N/A			Part Number	: D2003043	
This Issue	: 1/23/2007 S.O. No. : N/A			Drawing Number	: UNDER REVIEW	
Prsht Rev.	: NC			Project Number	: N/A	
First Issue	: N/A			Drawing Revision	: B	
Previous Run	: 25258			Material	: N/A	
Written By	: <u>W</u>			Due Date	: 2/5/2007	
Checked & Approved By	: <u>MF 07.01.23</u>			Qty:	5 Um: Each	
Comment	: Est. B 00.01.12 Re-format EC					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:	
1.0	DC	DOCUMENT CONTROL	
		Comment: DOCUMENT CONTROL Photocopy bluefile & type labels per PPP D2003-043	
2.0	M304TR0500W035	304 RD Tube .500 x .035W	
		Comment: Qty.: 0.9406 f(s)/Unit Total : 4.7030 f(s) Material: 1/2"AE x 0.035" wall AISI 304 SS tubing	Batch: <u>M102742 MF 07-01-30</u>
3.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
		Comment: SMALL & MEDIUM FAB RESOURCE 1 1-Form tube as per template D2003-043	<u>MF 01-01-30</u> (5)
4.0	QC5	INSPECT WORK TO CURRENT STEP	
		Comment: INSPECT WORK TO CURRENT STEP	<u>SB 07/01/30</u> (5)
5.0	M26506	Firesleeve-crkl .375IDia	
		Comment: Qty.: 1.0238 f(s)/Unit Total : 5.1188 f(s) Material: M2650-6 Heat sleeve	Batch: <u>M103232 MF 07-01-30</u>
6.0	MS208198J	Sleeve	
		Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s) Pick: Qty Part Number Description Batch	
	2 MS20819-8J	Sleeve	<u>M103116</u>
			<u>MF 07-01-30</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 07/02/05
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/23/2007 7:31:15 AM
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Drawing Name: TUBE ASSEMBLY

Job Number: 30374

Part Number: D2003043

Job Number:



Seq. #: Machine Or Operation:

Description :

7.0 AN8188J Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 AN818-8J Nut M10189

MF. 07-01-30

8.0 D2182 Heat Shrink



Comment: Qty.: 0.3750 f(s)/Unit Total : 1.8750 f(s)

Pick:

Qty Part Number Description Batch
1 D2182-045 Heat shrink B26009

MF. 07-01-30

9.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Cut as per template D2003-043 (10.75" long)

MF 07-01-31

2-Cut: 11.7" long as per Dwg D2003

MF 07-01-31

3-Assemble as per Dwg D2003

MF 07-01-31

10.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07/02/01

11.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

ST SW P 7/02/01 (5)

12.0 QC21 FINAL INSPECTION/W/O RELEASE



(5)

Comment: FINAL INSPECTION/W/O RELEASE

07/02/05

Job Completion



07/02/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D2003	
DATE		REV. B SHEET 1 OF 2	
99.06.08		TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	
A	90.04.09	SCALE NEW ISSUE	
B	99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)	

RELEASED

49.06.08 RE

NOTE: FLAT LENGTHS MAYBE
INCORRECT. BEND TO BENT
TOOL. REPORT TO ENGINEERING

UNDER REVIEW

CC 08.21 CB

CB
some flat 06.12.13
lengths wrong

P/N	TEMPLATE	ON CORRECT FLAT LENGTH	HEATSLEEVE LENGTH ¹	CUT LENGTH OF TUBE ²	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-8D SLEEVE	AN818-8D NUT	DESC.	MATERIAL ^{4/87}	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	7.3	8.12						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-005	T2003-005	9.8	10.62						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	20.0	19.63						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-009	12.38	12.44						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	33.31	32.38						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-013	T2003-013	12.7	13.54						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-015	T2003-015	17.2	18.00						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	17.0	16.25						2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	9.8	10.62					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-021	T2003-021	N/A	2.25					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-023	T2003-023	4.5	5.33					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-025	T2003-025	9.8	10.60					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-027	T2003-027	7.25	7.38					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-029	T2003-029	17.2	18.00					2	2	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6	
D2003-031	T2003-031	14.6	15.38	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29.75	29.62	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0	34.00	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34.00	2	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25					1	1	JET	6061-T6 0.375 OD x 0.035 W	WW-T-700/6	
D2003-101	T2003-101	13.25	13.13					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6	
D2003-103	T2003-103	12.38	12.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6	
D2003-105	T2003-105	10.75	10.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6	
D2003-107	T2003-107	12.75	12.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6	
D2003-109	T2003-109	8.25	8.125	2	2						TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.625			2	2				TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-116	T2003-116	4.0									HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0									HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-14	4.0									HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-16	T2003-16	4.0									HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6	
D2003-207	T2003-207	3.75	3.75					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6	

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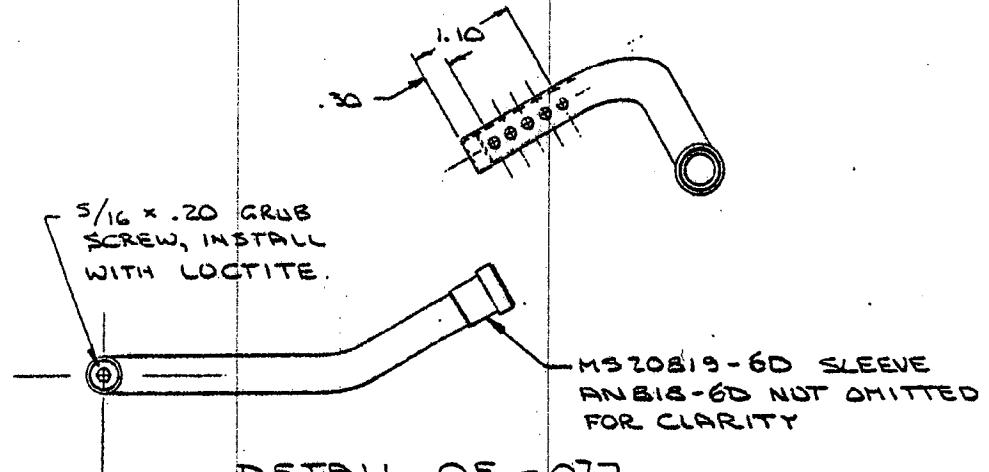
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2003
DATE		REV. B SHEET 2 OF 2 TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS

RELEASED
99.06.08 KB

Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

UNDER REVIEW CB
06.08.21 CB
06.12.13
Some flat lengths
under wrong



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30374